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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,430

06/18/2007

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EXAMINER

LEVINE, JOSHUA H

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,430	Applicant(s) OBREBSKI, ANDREAS	
	Examiner JOSHUA LEVINE	Art Unit 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-15 and 18-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-15 and 18-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to the amendment filed on 01/21/2010. As directed by the amendment: claims 1 and 5 have been amended, claims 6 and 16 have been cancelled, and new claim 35 has been added. Thus, claims 1-5, 7-15 and 17-35 are presently pending in this application.

Response to Arguments

2. Applicant's arguments with respect to claim 1-5, 7-15 and 18-35 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5, 8, 12, 19, 24 and 31-32 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitations of “preferably”, “is/are”, “and/or” render the claims indefinite.

Regarding claim 31, the claim language is not clear. The examiner interprets the claim to mean that the media inside the uptake container is contained by the uptake container.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-11, 13-15, 17, 20-22, 24-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Klopotek USPN 6,730,123 "Klopotek".

5. Regarding claims 1 and 15, 17, 30 and 33-35, Klopotek disclosed an artificial lens for an eye, which is characterized in that it has two or more media (optical fluid and ferro-fluid, column 3 lines 51-62) that are flexible in shape that come into direct contact with one another as lens elements (via membrane, column 3 line 58-62), in that the media that are flexible in shape contact on at least one interface and are disposed so that they can be displaced relative to one another, and in that the media that are flexible in shape are each formed as a liquid.

6. Regarding claim 2, Klopotek disclosed further characterized in that the at least two media that are flexible in shape are disposed in an uptake container forming a lens body (base portion and cover portion, column lines 51-62).

7. Regarding claims 3-4, Klopotek disclosed further characterized in that the latter is formed in a suitable manner for accommodation and in that it has a defined, pre-adjusted refractive power, (modified focusing performance, column 6, lines 66-67).

8. Regarding claim 5, Klopotek disclosed that it has a defined dynamic range of refractive power, and that the dynamic range preferably comprises at least 1.5 diopters. The above limitation is considered anticipated as Klopotek disclosed the instant claimed structure.

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9. Regarding claim 7, Klopotek disclosed that at least two media that are flexible in shape are provided in an uptake container forming a lens body, and that the media are fixed in space in uptake container (see figure 10).

10. Regarding claim 8, Klopotek disclosed that the media come into contact on at least one interface and that means for changing the size and/or shape of the interface(s) are provided between the media (via membrane, column 3 line 58-62).

11. Regarding claim 9, Klopotek disclosed that a control device is provided for controlling the artificial lens (IOL, column 3 line 49).

12. Regarding claim 10, Klopotek disclosed that the media that are flexible in shape cannot be mixed (via membrane, column 3 line 58-62).

13. Regarding claim 11, Klopotek disclosed that at least one boundary of the uptake container has at least one arched contour, at least in regions (via channel, column 3 line 53-56).

14. Regarding claims 13, Klopotek disclosed that one or more boundaries of the uptake container are made of a flexible material, at least in regions 80 (flexible barrier, figure 10):

15. Regarding claim 20, Klopotek disclosed that at least two of the media that are flexible in shape have different optical properties (ferro fluid and optical fluid).

16. Regarding claim 21, Klopotek disclosed that one medium that is flexible in shape is displaced or can be displaced in the direction of another medium that is flexible in shape each time via the means for changing the interface(s) in such a way that the

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curvature of at least one interface between the two media that are flexible in shape is altered (via membrane, figure 10).

17. Regarding claim 22, Klopotek disclosed that the means for changing the interface(s) can be disposed annularly around a clear opening (via lens of IOL).

18. Regarding 24, Klopotek disclosed that the means for changing the size and/or shape of the interface(s) between the media that are flexible in shape are formed on the basis of electrowetting. The examiner considers the shape of the interface to be capable of change via electrowetting as Klopotek disclosed a ferro-magnetic fluid.

19. Regarding 25, Klopotek disclosed that a first medium that is flexible in-shape and a second medium that is flexible in shape have a different electrical conductivity (ferrofluid and optical fluid), that the medium that is flexible in shape and has the smaller electrical conductivity is disposed between the medium that is flexible in shape and has the greater electrical conductivity and at least one electrode (nano-particles, column 4 line 4), and that by applying an electrical field between the at least one electrode and the medium that is flexible in shape and has the greater electrical conductivity, the interface between the two media that are flexible in shape is changed or can be changed.

20. Regarding 26-28, Klopotek disclosed at the means for changing the interface(s) are designed so as to act on at least one of the media that are flexible in shape, the means for changing the interface(s) are designed so as to produce a pressure (column 3 lines 51-54) on at least one of the media that are flexible in shape, and that a medium that is flexible in shape is or can be displaced each time, and in particular, pressed, via

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this means, at least at an interface in at least one preferred direction, in the direction of another medium that is flexible in shape.

21. Regarding 29, Klopotek disclosed that the mechanical means are formed as a piston device, a stamping device or a cylinder device (via channels, figure 10).

22. Regarding 31, Klopotek disclosed that the fixation in space of the media that are flexible in shape inside uptake container is provided by fastening means (via channels).

23. Regarding 32, Klopotek disclosed the fastening means are designed in the form of one or more different surface coating(s) inside the uptake container and/or in the form of a geometric configuration at least of regions of the uptake container (the channel has a different geometric configuration than the base and cover portion).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klopotek USPN 6,730,123 "Klopotek" as applied to claims 1, 2, 18, 22 and 24 above, and further in view of Esch USPN 7,122,053 "Esch".

With respect to claims 12, 14; Klopotek fails to explicitly disclose an artificial lens made transparent in one or more boundaries or media. However, Esch discloses the boundaries or media of a lens being transparent. (column 2, lines 1-6). Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Klopotek to have lens made transparent.

24. Claim 18-19 and 23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Klopotek USPN 6,730,123.

25. Regarding claims 18-19, Klopotek disclosed that the media that are flexible in shape have the same or approximately the same density and that the temperature range may lie preferably between 30 °C and 45 °C. 20. The above limitation is considered anticipated as Klopotek disclosed the instant claimed structure. However, if the density is not viewed to be the same, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the densities the same, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

26. Regarding claim 23, Klopotek disclosed that the clear opening at least corresponds to the maximum pupil diameter of the eye for which the artificial lens is specified. . The above limitation is considered anticipated as Klopotek disclosed the

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instant claimed structure. However, if the diameter is not viewed to be the same, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the diameter correspond to a pupil diameter the same, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA LEVINE whose telephone number is (571)270-5413. The examiner can normally be reached on Monday-Thursday 7:30am-5:00pm ETA.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 3774

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